
Oxypetalum rusticum (Apocynaceae, Asclepiadoideae), a New Species from the Espinhaço Range, Minas Gerais, Brazil

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ABSTRACT. The Latin diagnosis of *Oxypetalum rusticum* Rapini is provided to validate the species, proposed but not validly published in the survey of the Asclepiadoideae from the Espinhaço Range of Minas Gerais, Brazil. The species, endemic to the Diamantina Plateau, is closely related to *O. insigne* (Decaisne) Malme and *O. glabrum* (Decaisne) Malme, differing mainly by the wooly indumentum of the branches and the longer corpusculum of the pollinaria.

Key words: Apocynaceae, Asclepiadoideae, Brazil, Espinhaço Range, Minas Gerais, *Oxypetalum*.

Oxypetalum R. Brown includes more than 150 species distributed mainly in Brazil (Hoehne, 1916) and Argentina (Meyer, 1943), with its species richness decreasing toward the north of its distribution. The genus is usually recognized by the gynostegium, which is prolonged in a rostrum, and the translator arms of the pollinaria, which have lateral teeth.

Studies on the Asclepiadoideae from the Espinhaço Range of Minas Gerais, Brazil (Rapini, 2000; Rapini et al., 2001), have suggested new species and several taxonomic changes in the subfamily (see Rapini, 2002, for new species of *Ditassa* R. Brown and discussions on taxonomic concepts of Metastelmatinae genera). Here, the Latin diagnosis of *Oxypetalum rusticum* Rapini, a new species proposed but not validly published in the survey, is provided (for full description and paratypes, see Rapini et al., 2001).

***Oxypetalum rusticum* Rapini, sp. nov.** TYPE: Brazil. Minas Gerais: Mun. Datas [“Diamantina”], Diamantina–Gouveia road, km 605, 14 Feb. 1998 (fl), F. N. Costa, P. T. Sano, W. Villegas, L. Campaner & F. P. Andrade 35 (holotype, SPF; isotype, K). Figure 1.

Oxypetalo insigni similis, ramis et inflorescentiis racemiformibus lanatis, foliis persaepe latioribus superne villosis sed nervis lanatis, lacinii corollae sursum glabrescentibus et retinaculis maioribus, ultra 2.4 mm longis, recedens.

Twining vine; branches wooly. Leaves elliptic or ovate, cordate to reniform at the base, pilose adaxially, villous on the veins, villous abaxially, wooly on the veins. Cymes racemiform, with up

to 6 flowers. Corolla hirsute to pubescent abaxially, puberulent adaxially on the tube, barbulate on the throat, glabrescent toward the apex of the lobes; lobes oblong, 0.9–1.4 cm long, twisted, patent. Corona lobes scale-like to widely oblong, cleft, corniculate adaxially. Corpusculum spatulate, keeled to involute, 2.5–2.6 mm long; pollinia 0.65–0.85 mm long. Apex of the gynostegium prolongation coroniform, slightly bilobate. Follicles wooly to velutinous.

Oxypetalum rusticum, *O. insigne* (Decaisne) Malme, and *O. glabrum* (Decaisne) Malme, the last of which is sometimes considered a variety of *O. insigne* (Fontella-Pereira & Schwarz, 1983; Fontella-Pereira et al., 1984), form a complex of twining species with the gynostegium prolongation cup-shaped or coroniform to bilobate at apex. The new species differs from these two by its wooly (vs. glabrous to hispid) indumentum of the branches and mainly by its longer corpusculum (2.5–2.6 mm long vs. up to 2.1 mm long in the other two species). Due to the leaves usually broad, villous abaxially, and especially the wooly branches, *O. rusticum* is not subtle when compared with its closely related and relatively slender species (see Rapini, 2000, for photos of the three species), which is the reason for the specific epithet.

Phenology. *Oxypetalum rusticum* has been found with flowers between November and April, and with fruits in April.

Distribution and habitat. The species is restricted to the Diamantina Plateau, in the northern range of its closely related taxa: *O. glabrum* extends into the southern Diamantina Plateau and *O. insigne* to Serra do Cipó, also in the Espinhaço Range of Minas Gerais. *Oxypetalum rusticum* occurs only in *campos rupestres*, an open vegetation on quartzite or sandstone formations that appears at elevations above 900 m, and which is known for its high level of plant endemism (Giulietti et al., 1987, 1997; Rapini et al., in press).

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


Figure 1. *Oxypetalum rusticum* Rapini. —A. Habit, fertile branch, with indumentum in detail at right. —B. Flower. —C. Lobe of corona, adaxial view. —D. Appendage of gynostegium. —E. Pollinarium. Drawn by the author from the holotype, Costa et al. 35 (SPF).

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Literature Cited

- Fontella-Pereira, J. & E. A. Schwarz. 1983. Estudos em Asclepiadaceae, 18. Novas combinações e novos sinônimos. *Bradea* 4: 13–20.
- _____, M. C. Valente & E. A. Schwarz. 1984. Contribuição ao estudo das Asclepidaceae brasileiras, 21. Asclepiadaceae do município de Ouro Preto, Estado de Minas Gerais—Uma sinopse. *Bol. Mus. Bot. Kuhlmann* 7: 63–127.
- Giulietti, A. M., N. L. Menezes, J. R. Pirani, M. Meguro & M. G. L. Wanderley. 1987. Flora da Serra do Cipó, Minas Gerais: Caracterização e lista de espécies. *Bol. Bot. Univ. São Paulo* 9: 1–152.
- _____, J. R. Pirani & R. M. Harley. 1997. Espinhaço Range region. Pp. 397–404 in S. D. Davis, V. H. Heywood, O. Herrera-MacBryde, J. Villa-Lobos & A. C. Hamilton, Centres of Plant Diversity. A Guide and Strategy for their Conservation, Vol. 3. The Americas. WWF/IUCN, Cambridge.
- Hoehne, F. C. 1916. Monographia das Asclepiadaceas brasileiras. *Oxypetalum*, R. Br. e *Calostigma*, Dcne. Commiss. Linhas Telegr. Estrateg. Matto-Grosso Ama-
- zonas 38(1): 1–131, tabs.: 1–59; et ib. (1), suppl.: 1–13, tabs. 60–62.; et ib. (2): 1–29, tabs. 1–12.
- Meyer, T. 1943. Revisión de las especies argentinas del género *Oxypetalum* (Asclepiadaceae). *Lilloa* 9: 5–72 + 16 tabs.
- Rapini, A. 2000. Espinhaço Range, Minas Gerais, Brazil. Asclepiadoideae (Apocynaceae). In R. Forster, M. R. Metz & B. B. Lin, Rapid Color Guide nº 19. Environment and Conservation Programs, Field Museum, Chicago.
- _____. 2002. Six new species of *Ditassa* R. Br. from the Espinhaço Range, Brazil, with notes on generic delimitation in Metastelmatinae (Apocynaceae–Asclepiadoideae). *Kew Bull.* 57(3).
- _____, R. Mello-Silva & M. L. Kawasaki. 2001. Asclepiadoideae (Apocynaceae) da Cadeia do Espinhaço de Minas Gerais, Brasil. *Bol. Bot. Univ. São Paulo* 19: 55–169.
- _____, ____ & _____. In press. Richness and endemism in Asclepiadoideae (Apocynaceae) from the Espinhaço Range of Minas Gerais, Brazil—A conservationist view. *Biodiversity & Conservation*.